BIODIVERSITY MANAGEMENT AT GIPPSLAND WATER

Talk by Debbie Archer, Environmental Scientist with Gippsland Water

Gippsland Water services an area of 5000 square kilometres and has 100 water storages including Moondarra Reservoir (330,000 Megalitres). They service more than 64000 properties in 42 towns supplying 61,000 Megalitres each year. There are more than 2000 km of water mains and 17 water treatment plants. In dealing with wastewater nearly 55,000 properties are serviced in 24 towns collecting 26,000 Megalitres. There are 1500 km of sewer mains and 14 wastewater treatment plants, including the Gippsland Water Factory, and two ocean outfalls. They also manage a number of vegetation offsets throughout the catchment.

Gippsland Water manages biodiversity to:

- Meet its statutory and regulatory requirements.
- Provide a spatial and visual buffer.
- Provide a potential source of carbon sequestration for future projects.
- Provide native vegetation offsets.
- Provide an educational resource for the community, research and educational institutions.

Dutson Downs, Gippsland Water's largest parcel of land at 8341 ha was established 20 km south of Sale in 1954.

It has a diverse landscape of integrated activities comprising:

- Lagoon based wastewater treatment.
- Agribusiness.
- Soil and Organics recycling.
- Natural assets including threatened species.

Five threatened species have been found there and they work with agencies and interested groups to study, benchmark and protect them. The species are the New Holland Mouse, Wellington Mint-bush, Trailing Hop-bush, Dwarf Kerrawang and the Green and Golden Bell Frog. The main problem in the past has been destruction and fragmentation of habitat.

Additionally there are 4148 ha of remnant vegetation with very high conservation significance and 75 wetlands, the majority being ephemeral. Dutson Downs, being adjacent, enhances existing Ramsar wetlands and the Gippsland Lakes Coastal Park.

Managing biodiversity benefits the agribusiness by:

- Providing habitat for birds, mammals and insects which control pests and are a source of insect pollinators.
- Increasing shelter for stock, pasture and crops thereby increasing production.
- Reducing salinity, waterlogging, wind and water erosion.
- Providing a seed supply for revegetation.

Biodiversity management is facilitated through a Technical Reference Committee, which meets regularly to provide community views and expert technical advice.

There has been a full property survey for Ecological Vegetation Classes.

All Freehold Native Vegetation has been set up as offsets with legal security and 10 year management plans to increase biodiversity value.

Bushfire Management is carried out in conjunction with DSE and Parks Victoria. As well as reducing fire risk to staff and operation assets, it identifies appropriate fire regimes and strategies to target the significant environmental assets, including the five threatened species.

Ken Savage

BOTANY EXCURSION TO BAW BAW NP

For our February botany activity we had planned to identify plants seen on our summer camp to Dargo, but having cancelled our camp due to an out-of-control bushfire in the Heyfield area, we had no alpine plants to consider. Consequently we decided to have a day trip into our closest alpine region, Baw Baw NP. We decided to start at Baw Baw village given the January wildflower walk with FOBB was to Mt St

Gwinear. We extended our invitation beyond the botany group to club members who had missed out on the Dargo trip, so 16 members met in the Baw Baw village carpark at 10 am on Saturday 2nd February. The forecast was for a maximum of 12 degrees, so most people came prepared for wintry weather, but it was sunny all day and really not as cold as anticipated.

We walked along Candle Heath track beside the village, then headed up the narrow Mueller's track which winds through rocky terrain beneath a dense Snow Gum cover. We made quite good progress for a botany group – about 600 m in an hour and a half, recording all our plants along the way to add to our club plant data base for future reference. We were a little late for an abundance of flowers, but there were still plenty of Grass Trigger Plants *Stylidium graminifolium* colouring the green although many had already set seed. Bright yellow senecios also added to the colour, the main one being Fireweed Groundsel, *Senecio linearis*. Silver Fireweed *S. gunnii* was also flowering, resembling *S. quadridentatis* with its long narrow grey leaves and rayless flowers.

Kathie and Peter Strickland's book 'Sub-alpine Flora of the Baw Baw Plateau, Victoria' was very helpful in pinpointing the species of alpine plants along the track. The most numerous shrubs were Baw Baw Berry, *Wittsteinia vacciniacea*, Dusty Daisy-bush *Olearia phlogopappa var flavescens,* Alpine Orites *Orites lancifolia,* Alpine Mint-bush *Prostanthera cuneata* ,Mueller's Bush-pea *Pultenaea muelleri* and Beard-heath *Leucopogon gelidus*. These had largely finished flowering, although a few flowers remained on some of the mint and daisy bushes. Berries could be seen on the matted shrub Lilac Berry, *Trochocarpa clarkei*, named by von Mueller. The small shrub Mountain Baeckea, *B. utilis*, was in flower.

Everything was green and lush, and the snow gums had bright trunks in olive green and grey. They were *Eucalyptus pauciflora subsp acerina* which is confined to the Baw Baw plateau and Mt Useful. At the bottom of the track was a fine specimen of Myrtle Beech, *Nothofagus cunninghamii,* the only one we saw. The lush herb layer included masses of Mountain Cotula, *Leptinella filicula* and Ivy-leaf Violet *Viola hederacea*. Some of the leaves of the violets were remarkably broad and narrow, quite a different shape to usual, and when we reached the broader track at the top they were tiny little plants, so I was wondering if we had the Tiny Violet, but when I saw the usual flowers tall above the leaves I knew it was not so. Alpine Woodruff *Asperula pusilla* was also quite common and some plants were covered in their tiny white flowers.

Lunch was taken perched around the edge of a square wooden platform supporting the Maltese Cross T-Bar – the perfect back-to-back seating arrangement for introverts, but conversation flowed nonetheless. After lunch Ken, Ron and Estelle took the shorter Village Trail back, while the rest of us set out on the Summit Track keen to defy Ken's prediction that we couldn't possibly walk the 2.1 km in 2 hours. Meryl and Don Cracknell, new members who had proved remarkably patient dawdling with the botanists with their 'hours per kilometer' pace had set off for a real walk.

The Summit Trail passes through higher, more open snowgrass woodland. The summit stone cairn, originally constructed back in the 1880s to aid in surveying, is home to a good many copper-coloured skinks that obviously enjoy the combination of sun-warmed rock and safe hiding places. A lookout near the cairn offers good views down into some of the frost hollows that are a feature of the Baw Baw plateau.



Scaevola hookeri *Photo: Phil Rayment*

New plants along the Summit track included

a large Broad-leaf Teatree *Leptospermum grandifolium* in full flower near the lookout, pretty little Alpine Fan-flowers *Scaevola hookeri* and Cascade Everlasting *Ozothamnus secundiflorus*. Two species of woodrush were found: the usual *Luzula meridionalis* and *L. modesta*, the Southern Woodrush. We also spotted our first orchid for the day, the Veined Sun-orchid *Thelymitra cyanea*.

Ken et al having taken the shorter track had plenty of time to botanise at the sphagnum bog near the base of the Tank Hill Platter close to the village, so by the time we arrived (within the 2 hours, just) we could be given a quick tour of the new plants.

The Mauve leek-orchid *Prasophyllum suttonii* and small Alpine Leek-orchid *P. tadgellianum* were flowering, as were Alpine Trachymene *Trachymene humilis,* Alpine Podolepis *Podolepis robusta* and Mueller's Snow-gentian *Chionogentias muelleriana subsp. muelleriana.* Close by was a beautiful Broad Eyebright, *Euphrasia gibbsiae,* in full flower. Having failed to identify any of the grasses along the track, beyond deciding they were poas, we were pleased to finally spot the Soft Snow-grass *Poa hiemata* described in the Stricklands' book growing here.



Euphrasia gibbsiae *Photo: Phil Rayment*

Those looking up rather than down were rewarded with many sightings of Flame Robins and a few of us were lucky enough to get a good view of an Olive Whistler.

Wendy Savage & Philip Rayment

PLEASE NOTE

Daylight Saving ends 2am Sunday April 7

2013-14 Subscriptions due now – please see inside back cover for full details.

AGM - FRIDAY 22 MARCH 7.30PM

GRAND STRZELECKI TRACK - MACK'S CREEK LOOP

Having forgotten to ask for a volunteer to write up the excursion, this is a composite piece by Wendy, Estelle and Gill. David Stickney declared that it wasn't worth writing up as there were so few birds to be seen!

For our November excursion, we met at the Tarra Bulga Visitor Centre at Balook to walk part of the Mack's Creek Loop of the Grand Strzelecki Track. Our 15 members were joined by Kevin Heggen, the contractor in charge of building the track. While we had our morning cuppa, Ken Harris and Kevin drove down to the planned end of our walk and left Ken's car in order to bring the drivers back to their cars after the walk. The Mack's Creek loop is 24 km long, but we were planning to walk about 6 km. We started by driving a couple of km down the road to meet the track and start our walk. About 4 or 5 hours later, when we emerged at the point where Ken had parked his car, we were very hot and very tired. Driving back along the the Yarram-Balook road to our cars, which is part of the 24 km loop, Ken measured 8.9 km on his odometer. Our walk has been less windy than the road, but was possibly closer to 8 km. We really set a record for a field naturalist excursion with our pace.

Having viewed the DVD about the making of the track at our meeting the night before, we were able to appreciate the sheer effort of carrying all the track marking posts in on the shoulders of the workers. Kevin had traversed that track many many times, carrying loads, but still enjoyed walking it with our group.

Wendy Savage

At its start, the track was deceptive with its gentle slope and well-grassed surface with only a few muddy surfaces to deter us at all. With banks of ferns defining its verges and

ranks of tree ferns behind them, it was a very pleasant walk on a sunny day. Climbing up a tree trunk was the creeper *Fieldia australis* with a couple of fading pale yellow bells still clinging to their stems. The track followed the spur down towards Macks Creek and, as the ferns gave way to more open forest, it became ever steeper. Here the track follows the ridge and from it, through the trees, could be seen the dark canopy top in the valley below with splashes of white from some flowering plants. The further slope was covered with a mass of dark green foliage and, on a more distant hill, the different green of pine trees. Occasional rocks were smothered with mosses and paler liverworts. Amongst the tall trees behind them were eucalypts, the slender rounded grey-green trunks of Southern Sassafras (*Atherosperma moschatum*) which were decorated with splashes of greyish lichens, and the smaller Cherry Ballarts (*Exocarpos cupressiformis)* with their feathery green branchlets, and Sticky Wattle (*Acacia howittii*), the sticky side of their dark-green phyllodes glinting in the sun. We didn't see many birds though we could hear Fan-tailed Cuckoos calling and Eastern Whipbirds cracking their whips.

The track dropped steeply towards the creek and we lunched on its banks, perched on grassy mounds or grey rocks or on the much larger boulders that blocked much of its course. There were three more crossings of Macks Creek, some more hazardous than others. Macks Creek is also the creek which flows through Bulga Park. One of the crossings was close to a waterfall with an almost sheer drop of about ten metres and a rock platform at its base worn smooth over the centuries by water flooding over it at times of heavy rain. At times the vegetation crowded in on the track, which was clearly marked, and at those times we had to watch out for stinging nettles. On the lower levels Maiden-hair fern and Mother-shield ferns grew. Interpretive signs have already been placed at some points. Eventually we left the National Park behind and entered the section of walk that passes through HVP Plantation land. There much of the vegetation was pine trees and, at one point, across the creek was a hillside denuded of trees, all that was left being green grass and the stumps left when the timber was felled.

Much of the time the track followed the course of the creek which flowed at the bottom of the hill we were on. Towards the end of that section of the track it became very steep. Steps had been dug into the dirt of the almost sheer hillsides but many of these had been washed out with the heavy rains during this year and it was difficult to get a secure foothold. A couple of us decided that the safest way to descend those dusty, slippery slopes was to toboggan down them on our backsides! In all, it was quite an adventurous day. At times, the scenery was of the picture-postcard variety, especially when near, crossing or looking down into the creek. For me, the one disappointment of the day was that the distance to be covered and the, at times, difficult terrain to traverse did not give me sufficient time to stop and appreciate the scenery, really see what vegetation was along the track nor how it altered with the variations in the terrain. However, I could not help but be impressed at the work that people had put in to create the track. For them, the conditions would have been even more difficult and possibly hazardous at times. They are to be congratulated on what they have done to create the Grand Strzelecki Track and so fulfill a dream.

Estelle Adams

The section of the track we traversed on Saturday 24 November is a mixture of easy strolling through a magnificent forest of tree ferns on a more-or-less level path, green and soft underfoot; some gently undulating sections; and steep ups and downs which present a challenge. The five creek crossings add a different dimension and some really picturesque photo opportunities (but not while actually crossing I would suggest!). Although hard work at the time, the effort expended makes the overall experience more satisfying. One can proclaim with great pride at the end – "I did it!"

Gill Bremner

REPORT ON BUSINESS MEETING HELD 18.2.2013

General Meetings & Excursions

Friday 22 March: **AGM**. Fossil Megafauna of SE Australia – Mike Cleeland

Saturday 23 March: Related excursion to Cape Liptrap. Meet **11am** at Bunurong Environment Centre Inverloch for introductory talk, and lunch, then drive to field site in Tarwin for 2pm low tide. Charge (for Environment Centre) $150 ($50 for talk and $5/person on excursion).

Friday 26 April: Pre & Post-fire Monitoring at Wilsons Prom – Mary Ellis

Saturday 27 April: Excursion to Wilsons Prom. Meet 10am at carpark behind Prom entrance station. Carpool at Mirboo North Baromi Park (near Baths Rd reserve) by 8.30am.

Botany Group: Saturday **6 April** (due to Easter) – Wetland plant survey at Dutson Downs. Meet 9.30 at Traralgon Mexican for carpooling, or 10am at carpark opposite bakery in Rosedale. Contact: Wendy Savage ☎ 5634 2246

Bird Group: Tuesday 2 April – Rintoulls Creek. Meet by 8.30am at carpark opposite Tyers Store, near football ground. Contact: Alix Williams ☎ 5127 3393, alixw@spin.net.au

Finance – Balances: Cash Mgt Trading A/c $3084.00. Term Deposit $13,327.00.

Business Arising, Correspondence & General Business

Offer of grass tree stickers from Catherine Eldridge – will follow up earlier contact requesting they be posted to us.

Summer Camp to Dargo cancelled due to bushfire risk. Will book venue for Jan 2014 instead of Erinundra as advertised on the program, and will offer to pay deposit.

ANN meeting in Dec at Geelong to try to arrange a more sustainable future for the organization attended by Phil and Estelle. Ann will be a subgroup of SEANA while decisions are being made about its structure. Phil (acting secretary) will attend next meeting April 13 at FNCV Blackburn with teleconference links to people in other states. Next ANN get-together in Hobart 18-26 October 2014.

ANH medallion – will donate $100. We will nominate Ken Harris, David Stickney will prepare application.

Container deposit scheme support request – will send letter to Minister for Environment & Climate Change.

Naturalist binding – the next 4 years of Naturalists are ready to be bound. Will ask Peter Lendon to do this to match the previous editions.

Club brochure – 100 copies have been produced for distribution. Will place them in libraries and Traralgon Information Centre.

Naturalist printing. Motion: Will change from Gippsland Printers to BizOnline for printing Naturalist due to dissatisfaction with service. G Bremner/K Harris

Boolarra Landcare group twilight walk at Old Mill Site, led by David Stickney, David Mules and Ken Harris – Ken set up mothing sheet and prepared CD of species found for the group. Paid $100 to club.

Fungimap conference at Rawson 24-27 May – registration started Feb 4. Will forward email to interested members.

Changes to Incorporation. Alix has carefully compared new model rules with previous club rules and by making some changes to our procedures we can use the new model rules. Statement of purposes will be sent to committee to check. Changes include: Sec will be public officer, and new members will be approved by committee. We will make the business address for the ABN that of the Secretary.

Website update – thanks to John Sunderland for completing this.

Alix interviewed by LINK on birds for April edition.

Rolf Willig's owling program can be made available for members.

AGM – positions vacant: President, Vice President no 1, Treasurer and Assistant Secretary. Will prepare forms for GM.

Conservation Matters

Nothing to report.

GUEST SPEAKER FOR APRIL

Mary Ellis is a member of the South

Gippsland Conservation Society. Her background is a degree in plant genetics from Melbourne University. She has published several books on botanically related subjects: herbs, roadsides, significant trees, conservation, gardening and bush walking. At the time of the April 2005 fire at Wilson's Prom, Mary was a member of the Advisory Group for Wilson's Prom and she suggested that scientific monitoring of the recovery of the vegetation would be useful as a management tool for the future. She contacted friends and gathered together a band of volunteers who were happy to carry out fieldwork monitoring the recovery – they became known as the Prom'n'aides. They have been working once a month since January 2006, with interruptions when the Prom has been closed or sites have been inaccessible. However they have collected a vast amount of data and some of it has been analysed. There have been some very valuable and unexpected results from this work.

WELCOME to new member this month Meredith Fletcher. We wish you a long and happy association with the club.

ANN 2012 GET-TOGETHER IN CANBERRA

The biennial gathering of the Australian Naturalists Network was hosted by the Field Naturalists Association of Canberra (FNAC) over the period 13-21 October, 2012. Get-Togethers have been held in all even-numbered years since the first event in Alice Springs in July 2000. Dick Southcombe (Geelong FNC) has coordinated the ANN since its inception, and it was very much regretted that ill-health prevented him from going to Canberra.

61 inter-state naturalists and a good number of FNAC members participated in an excellent program of institutional visits, field trips and lectures over the eight-day period, with the morning of Sunday 21st October being devoted to a meeting to consider the future organisation of the ANN. We enjoyed Canberra's best spring weather, with clear sunny mild to warm days (and some bracing evenings). The FNAC is to be commended for its great organisation of such an extended event involving complex logistics of transporting participants from disparate accommodations across northern Canberra to several sites each day.

Rather than attempting to write something about each day's activities, I've opted to summarise some of the highlights, grouped by talks, institutional visits and field trips. This may be of interest to folk planning future visits to our national capital.

Talks/ Lectures

A pleasant reception at the Yowani Country Club in North Canberra on the evening of Saturday 13th October was preceded by a welcome and introductory talk by Rosemary von Behrens, the convenor of FNAC's organising committee. The reception allowed us all to catch up with old friends and meet 'new faces'.

(i) Ian Fraser. We gathered at the CSIRO Discovery Centre (near Black Mountain) on the evening of Monday 15th October for two lectures.

The first was presented by naturalist, author and broadcaster Ian Fraser, entitled "Why the ACT is a great place to be a naturalist". He began by asking the question "What is a naturalist?", his answer being "A person who *wanders* in the natural environment with a sense of *wonder*", which appealed to me.

Ian noted that the ACT represents a tiny 0.03% of Australia's land area, but displays over 200 of our bird species; the Black Mountain Reserve alone protects a great diversity of the orchid flora. Part of the reason for its species richness is Canberra's location at the junction of a diversity of ecosystems including montane forests, grassy woodlands and sub-alpine environments. Ian posed many questions raised by our natural world, just one being: How does our Snow Gum adapt to its short summer environment by actually adjusting its optimum level of photosynthesis activity to the prevailing sunny days temperatures at its particular altitude?

Phil Rayment

To be continued next issue.

One of the many resident skinks in the Mt

Baw Baw summit cairn, from the February Botany Excursion.

We don't just look at plants!

